# SUN2000-150K-MG0
## Smart PV Controller



Arc Fault Protection

PV Ground-Fault Protection

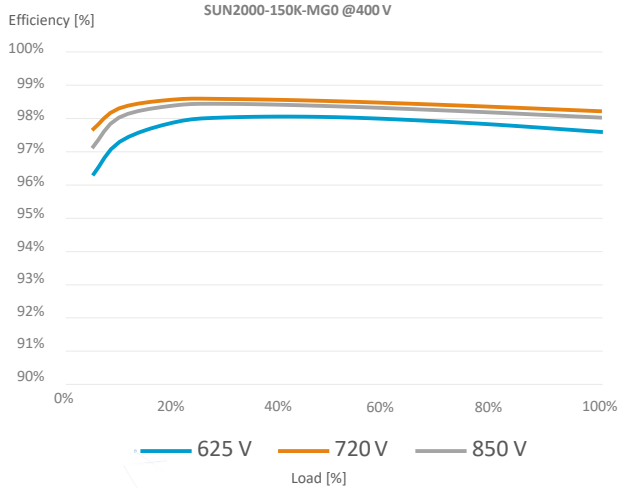
PID Recovery

Smart String Level Disconnector

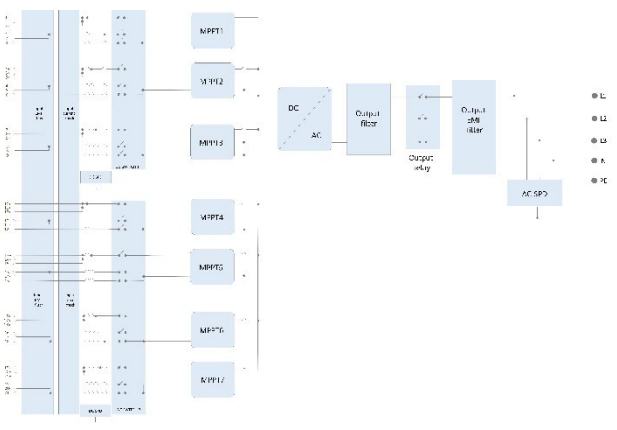
Smart Connector Temperature Detector

MBUS

### Efficiency Curve




### Circuit Diagram



| Technical Specification | SUN2000-150K-MG0 |
|---|---|
| **Efficiency** | |
| Max. efficiency | 98.6% @400V, 98.8% @480V |
| European efficiency | 98.4% |
| **Input** | |
| Max. Input Voltage [1] | 1,100 V |
| Max. Current per MPPT | 48A |
| Max. Current per Input | 23A |
| Max. Short Circuit Current per MPPT | 66A |
| Start Voltage | 200 V |
| MPPT Operating Voltage Range [2] | 200 V ~ 1,000 V |
| Number of MPP trackers | 7 |
| Max. input number per MPP tracker | 3 |
| **Output** | |
| Nominal AC Active Power | 150,000 W |
| Max. AC Apparent Power | 165,000 VA |
| Max. AC Active Power (cosϕ=1) | 165,000 W |
| Nominal Output Voltage | 380 V/400 V/480Vac |
| Rated AC Grid Frequency | 50 Hz / 60 Hz |
| Nominal Output Current | 227.9 A @380 V, 216.5 A @400 V, 180.4A @480Vac |
| Max. Output Current | 253.2 A @380 V, 240.5 A @400 V, 200.5A @480Vac |
| Adjustable Power Factor Range | 0.8 leading... 0.8 lagging |
| alternating current THDi | < 1% |
| **Protection** | |
| Anti-islanding Protection | Yes |
| AC Overcurrent Protection | Yes |
| DC Reverse-polarity Protection | Yes |
| PV-array String Fault Monitoring | Yes |
| DC Surge Arrester | Type Ⅱ |
| AC Surge Arrester | Type Ⅱ |
| DC Insulation Resistance Detection | Yes |
| Residual Current Monitoring Unit | Yes |
| Smart String Level Disconnector | Yes |
| Arc Fault Protection | Yes |
| Terminal Temperature Detection | Yes |
| PID Recovery | Yes |
| PV Ground-Fault Protection | Yes |
| **Communication** | |
| Display | LED indicators; FusionSolar APP |
| RS485 | Yes |
| USB | Yes |
| Smart Dongle-4G | Smart Dongle – 4G / WLAN (Optional) |
| Monitoring BUS (MBUS) | Yes (isolation transformer required) |
| **General Data** | |
| Dimensions (W x H x D) | 1,000 x 710 x 395 mm |
| Weight (without mounting plate) | ≤ 99 kg |
| Operating Temperature Range | -25°C ~ 60°C |
| Cooling Method | Smart Air Cooling |
| Max. Operating Altitude | 4,000 m (13,123 ft.) |
| Relative Humidity | 0 ~ 100% |
| DC Connector | Amphenol HH4 |
| AC Connector | Waterproof Connector + OT/DT Terminal |
| Protection Degree | IP66 |
| Topology | Transformerless |
| **Standard Compliance (more available upon request)** | |
| Certificate | EN 62109-1/-2, IEC 62109-1/-2, IEC 62116, IEC 61727, IEC 60068, IEC 61683 |
| Grid Connection Standards | VDE-AR-N4105, EN 50549-1, EN 50549-2, RD 661, RD 1699, C10/11 |

1. The maximum input voltage is the upper limit of the DC voltage. Any higher input DC voltage would probably damage inverter.
2. Any DC input voltage beyond the operating voltage range may result in inverter improper operating.